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(54) **CATHETER APPARATUS**

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(56) **References Cited**

U.S. PATENT DOCUMENTS

5,558,651 A 9/1996 Crawford et al.
7,534,227 B2 * 5/2009 Kulli A61M 5/3273 604/164.08
(Continued)

FOREIGN PATENT DOCUMENTS

EP 2251057 B1 11/2010
GB 2451153 B 1/2009
(Continued)

OTHER PUBLICATIONS

International Search Report for PCT/IB2013/051158 dated Jun. 5, 2013.

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(57) **ABSTRACT**

An intravenous catheter apparatus having a needle having a needle shaft, a needle tip at the distal end of the needle shaft and a needle hub mounted to the proximal end of the needle shaft, an intravenous catheter tube mounted to a catheter hub and a needle guard movable on the needle shaft. The needle guard having a base portion having a needle passage extending in an axial direction from a proximal side of the base portion through the base portion to a distal side of the base portion, first and second arms extending substantially in the axial direction from the distal side of the base portion and a distal wall which is transversely arranged at a distal region of the first arm. A recess is provided in the needle guard that receives a stopping element for stopping movement of the needle shaft relative to the needle guard.

23 Claims, 6 Drawing Sheets